

#### west virginia department of environmental protection

Office of Oil and Gas 601 57th Street SE Charleston, WV 25304 (304) 926-0450 (304) 926-0452 fax Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

May 15, 2014

#### WELL WORK PLUGGING PERMIT

#### Plugging

This permit, API Well Number: 47-2101461, issued to HARPER, HAYDEN ENERGY KA, LLC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalities being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

James Martin

Operator's Well No: 1

Farm Name: BALL, ALPHEUS

API Well Number: 47-2101461

Permit Type: Plugging Date Issued: 05/15/2014 WW-4B . Rev: 2/01

1) Date <b>February 20</b>	, 2014
2)Operator's	
Well No. A Ball #1	
3) API Well No. 47-021	- 01461

#### STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

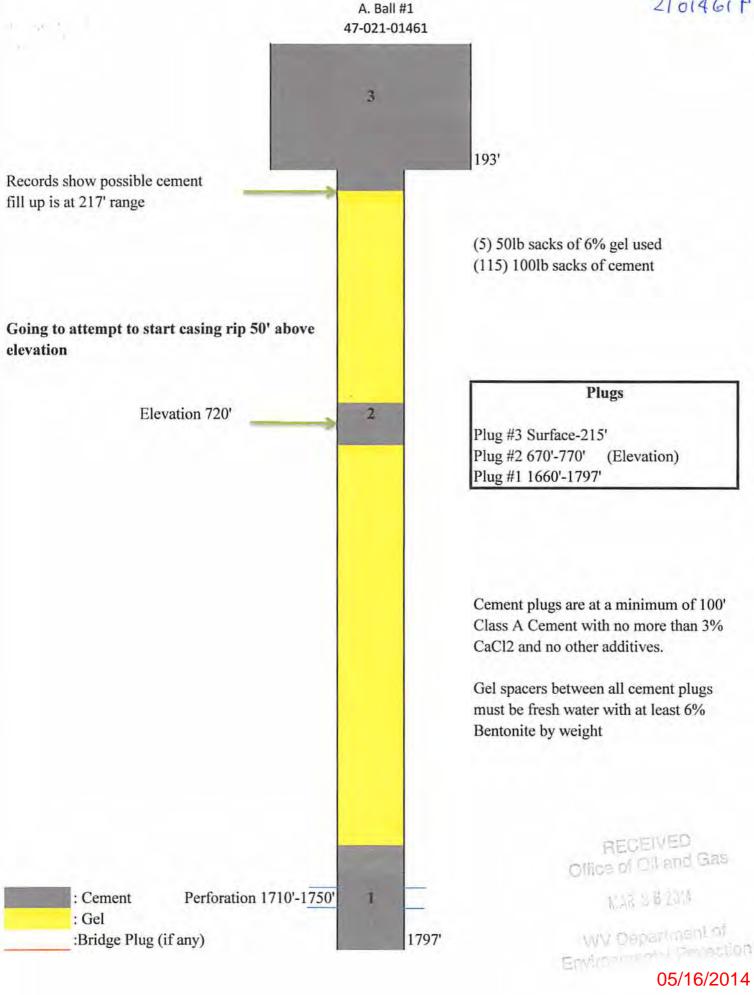
	APPLICATION FOR A PERM		
4)	Well Type: Oil/ Gas X/ Liquid		- <del></del>
	(If "Gas, Production X or Und	lerground storage	Deep/ ShallowX
5)	Location: Elevation 720'	watershed Little K	Kanawha River
	District DeKalb		Quadrangle Glenville
6)	•		ent Brett McDonough
	Address 1001 Moorehead Square Dr. Suite 350	Addr	ess 1001 Moorehead Square Dr. Suite 350
	Charlotte, NC 28203		Charlotte, NC 28203
81	Oil and Gas Inspector to be notified	9)Plugging Cont	ractor
0,	Name Bryan Harris		hwork Oil & Gas, LLC
	Address P.O Box 157	<del></del>	3165 Elizabeth Pike
	Volga, WV 26238		Elizabeth, WV 26143
	See attached procedure and diagram on the	e following page,	A. Bail #1 47-021-01461.
	ification must be given to the district of can commence.	•	MAR 2 3 2014
Wor}	order approved by inspector	Ham	DateWV3\2014 of Environmental Protection
			<u> </u>

## PERMIT CONDITIONS

West Virginia Code § 22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

#### **CONDITIONS**

- 1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
- 2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
- 3. Well work activities shall not constitute a hazard to the safety of persons.
- 4. This well is under a consent order and must be plugged within two years of the date of issuance of this permit.





#### STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION 7

Quadrangle Glenville Permit No. GIL-1461

WELL RECORD

Oil or Gas Well Both

Company Sinstar Development Company Box 350, Spencer, West Virginia	Casing and Tubing	Used in Drilling	Left in Well	Packers
Form Alpheus Ball Hrs. Acres 175		D. J.	wen	
Location (waters) Little Kanawha River Well No. 1 Elev 720'	Size	20'	20'	Kind of Packer
District DeKalb County Gilmer	13			
The surface of tract is owned in fee by Alpheus Ball Hrs	10 3/4	193' √	0	Size of
Address Glenville, W.Va.	8175/8	719'	0	
Mineral rights are owned by Same	6%			Depth set
Drilling commenced September 6, 1962	5 3/16 3-4½	1797'	1797'	Perf. top 1710
Drilling completed September 29, 1962	2			Perf. bottom 1750
Date Shot NO From To	Liners Used			Perf. top
Open Flow 2 /10ths Water in 1 Inch	20161			1411.00104
	CASING CEM	ented ut		6.No. Ft. Date 200 sks. cement
Rock Pressure Not Checked lbs. hrs. None bbls., 1st 24 hrs.	COAL WAS E			* 17 17 011
WELL ACIDIZED NO	FEE	TIN	CHES	FEETINCHES
WELL FRACTURED 800 bbl. H20 34,000 sand	FEE	rINC	CHES	FEETINCHES

1,200,000 cu. ft. RESULT AFTER TREATMENT.

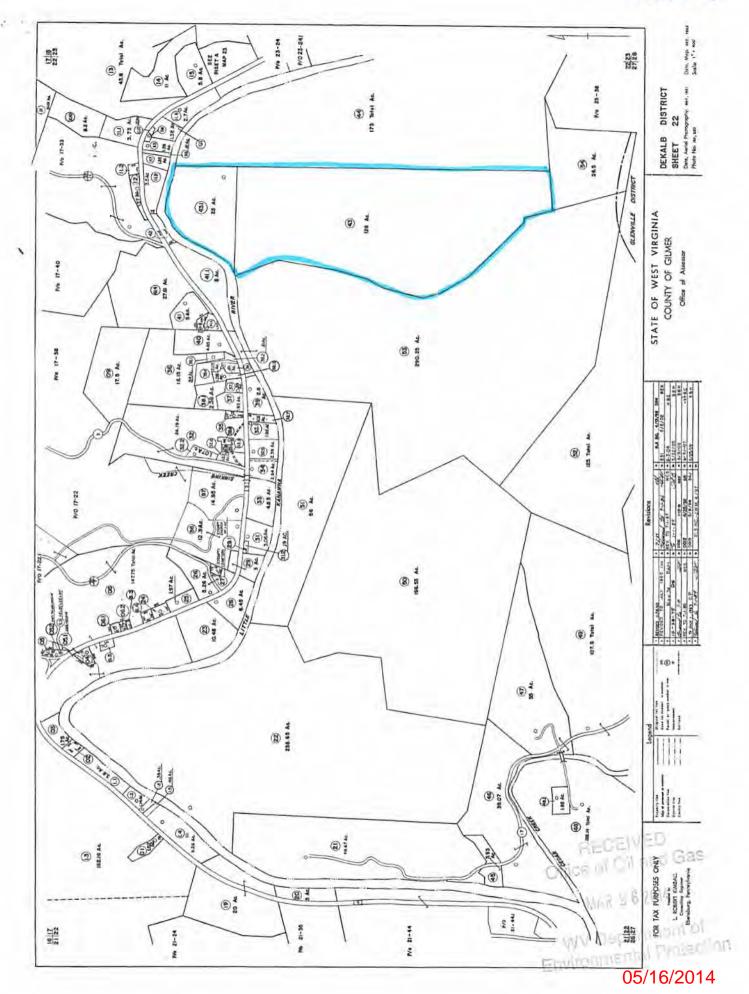
820# in 24hrs. Estimated 10 bbl. ROCK PRESSURE AFTER TREATMENT.

Fresh Water None

Formation	Color	Hard or Soft	Тор	Bottom	Oil, Gas or Water	Depth	Remarks
Top Soil			0	10			
Red Rock			10	55			
Slate			55	80			
Red Rock			80	115			
Slate			115	150			
Red Rock			150	170			
Slate			170	240			
Red Rock			240	250			
Slate & Sh	ells		250	330			
Sand			330	381			RECEIVED
Shells & S	late		381	500		01	Commence of the commence of th
Sand			500	535	60	24252627283	We are
Slate & \$h	ells		535	645	(Special Control of the Control of t	200	MAR 2 6 2014
Sand			645	759	1011	CHUND	Department of
Slate			759	898	BEALDI IVS: SA	2 257627 2 D	ninental Protestion
				(over)	1	ELLING OF	

Formation	Color	Hard or Boft	Top 7	Bettem	Oil, Gas or Water	Depth Found	Remarks
Sand			898	959			
Slate			959	1030			
Sand			1030	1080			
Slate			1080	1120			
Salt Sand		1	1120	1161			
Slate			1161	1185			7.
Sand			1185	1215			
Slate			1215	1230			
Sand			1230	1245			
Slate			1245	1274			
Sand			1274	1357			
Slate			1357	1377			
Lime	1		1377	1396			1
Sand			1396	1403			
Slate			1403	1415			
Lime			1415	1560			
Slate			1560	1680			
Sand			1680	1756			
Slate			1756	1778		i i	
Total Dep	th			1797 🗸			Y.
43050 40			,				
	0.0			1			0
						/	
	Ì						
			0.00				
	and to	1		,			
			e- 11 11				RECEIVED Office of Oil and Ga
	3						MAR 9.6 2014

APPROVED Sinstar Development Company, Owner Proved On By (Title) 05/16/2014



WW-4A Revised 6-07

1) Date: Februa	ry 20, 2014		
<ol> <li>Operator's Well N A. Ball #1</li> </ol>	umber		
3) API Well No.: 47 -	021	01461	

### STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

(a) Name	ner(s) to be served:  RoxII D. Hamnic	5) (a) Coal Operator Name
Address	PO BOX 196	Address
	Glenville, WV 26351	
(b) Name		(b) Coal Owner(s) with Declaration
Address		Name
		Address
(c) Name		Name
Address		Address
) Inspector	Bryan Harris	(c) Coal Lessee with Declaration
Address	P.O Box 157	Name
*********	Volga, WV 26238	Address
Telephone	304-553-6087 or 304-472-1732	
		E: You should have received this Form and the following documents:

- well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

Well Operator Hayden & Harper KA, LLC

By:	Bratt McDoneegh MICHAEL FOX MINEL 1860
Ita:	Vicu-Brooklent CFO
Address	1001 Moorehead Square Dr. Sulte 350
	Charlotte, NC 28203
Telephone	704-343-2447
Shere Klener	Sherri Palmer Notary Public Mecklenburg County Notary Fublic North Carolina My Commission Expires
My Commission Expires 9-21-18	
Oll and Gas Privacy Notice	Office of Gil and Gas

Oll and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyoffiers wy.gov.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY		
<ul> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that We can return the card to you.</li> <li>Attach this card to the back of the mailplece, or on the front if space permits.</li> </ul>	A. Signature  X A A A A A A A A A A A A A A A A A A		
Roxil Harrice	D. Is delivery address different from item 17 🗆 vos If YES, enter delivery address below: 🗆 No		
PO. Pax 196			
Glenwile WO 26351	3. Service Type  Certified Mail		
PO. Box 196	☐ Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchanding		

Office of Oil and Gas

WAR 2 6 2014

WAY Department of
Emiliation Protection

WW-9 Rev. 5/05

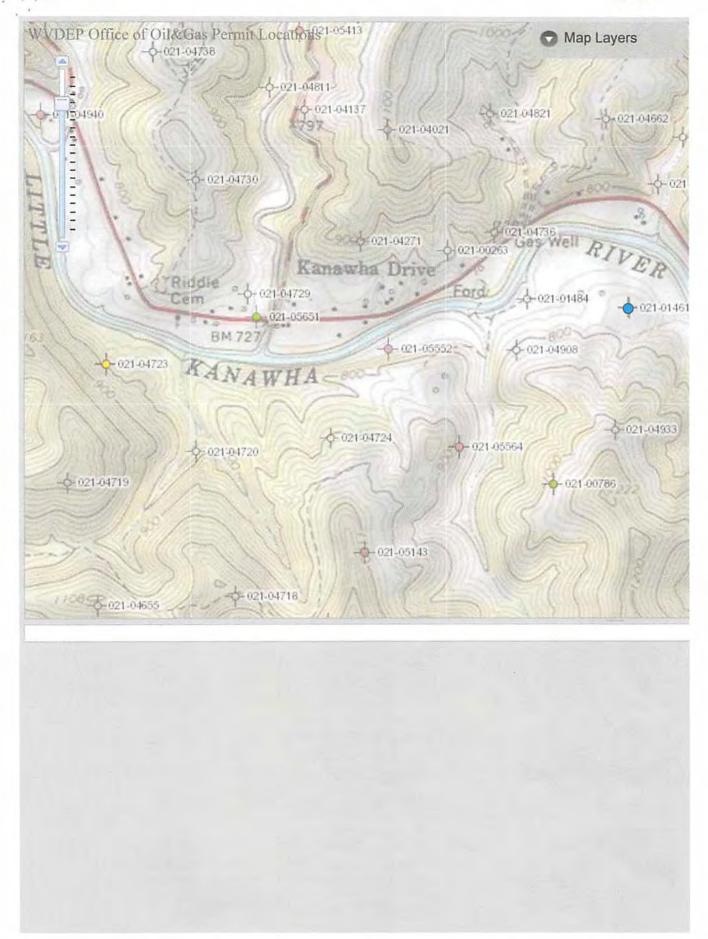
Pa	geof
API Number 47 - 02	01461
Operator's Well No A	Ball #1

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

	<sub>le</sub> Hayden & Harpe				P Code 4944953		
Watershed Life	tle Kanawha River		Qı	adrangle Glen	ville		
Elevation 72	20'	County Gilmer			District Dekalb		
Description o	fanticipated Pit Waste:	fluids used and	associ	ated with we	ll plugging act	ivities	
Will a synthet	ic liner be used in the pi	it? Yes 20 M	11-				
Proposed Dis	oosal Method For Treate						
	Land Appl						
		nd Injection ( UIC Pe	ermit Num	ber		)	
		API Number				)	
	X Off Site Di	spposal (Supply form plain Solidify with cerr	n WW-9 for nent and lif	or disposal locati fe, bury.	on)		
Proposed Wo	rk For Which Pit Will B						
Toposcu wo	Drilling	c Oscu.		Swabbing			
	Workover		X	Plugging			
	Other (Ex	nlain	-				
aw or regulat I cen application for botaining the	the permit are enforcea ion can lead to enforcen tify under penalty of la orm and all attachment information, I believe submitting false informa	nent action. aw that I have person as thereto and that, be that the information	nally exam based on is true	nined and am fa my inquiry of t ccurate, and con	umiliar with the inf those individuals in mplete. I am awa	ormation submitted	
	icial Signature		1	7/			
Company Off	icial (Typed Name)Br	ett McDonou	gh				
	\/ioo Dro	esident					
Company Off	icial Title VICE Pre	Joidont					
company On							
	d sworn before me this	12th days	of M	arch	20 [1]		
	d sworn before me this	12th day o	of M	arch	, 20 14	- MANAGE A	
	d sworn before me this	12th day o	of M	arch		THE EDEE TO	
	ad sworn before me this	12th day o	of M	arch	, 20 1U Notory Public	ORES Of Oil a	
	ad sworn before me this	12th day o	of M	arch		ORES Of OHE Notary P	
	d sworn before me this			arch		Notary P Mecklenburg	
	Jurayh	12th day o		arch			

•				
Property Boundary	Diversion Comments of the Comm			
Road = = = = = = = = = = = = = = = = = = =	Spring —			
Existing Fence — X — X — X —	Wet Spat			
Planned Fence / / /	Drain Pipe with size in inches  Waterway  Cross Drain  Artificial Filter Strip  Pit: cut walls			
Stream				
Open Ditch				
Rock ESESE				
North N				
Buildings	Pit: compacted fill walls			
Water wells	Area for Land Application of Pit Waste			
Drill site				
Proposed Revegetation Treatment: Acres Disturbed	Prevegetation pH 6.4			
Lime 2 Tons/acre or to correct to pH	6.5			
<u> </u>				
reminizer (10-20-20 or equivalent) 5 1 1 105/	acre (500 lbs minimum)			
Mulch pulp fiber at 0.5-0.75	сте			
Seed	Mixtures			
Area I	Area II			
Seed Type lbs/acre	Seed Type lbs/acre			
Tall Fescue 40	Tall Fescue 40			
Ladino Clover 5	Ladino Clover 5			
Attach: Drawing(s) of road, location,pit and proposed area for land appl	ication.			
Photocopied section of involved 7.5' topographic sheet.				
Plan Approved by: Buye D'Ass.	Office of Oil and Gas			
Comments:	MAR 2 6 2014			
	Environmental Protection			
Title: 0.4 + Gas Inspector				
	Date: 3-20-14			



WW-7 8-30-06



# West Virginia Department of Environmental Protection Office of Oil and Gas WELL LOCATION FORM: GPS

WELL LUCA	TION TORMS OF S
API: 47-021-01461	WELL NO.: #1
FARM NAME: A. Ball	
RESPONSIBLE PARTY NAME: Ha	yden & Harper KA, LLC
	DISTRICT: DeKalb >
QUADRANGLE: Glenville	372
SURFACE OWNER: ROXII D. H	amric
ROYALTY OWNER: ROXII D. H	lamric
UTM GPS NORTHING: 4311681	
UTM GPS EASTING: 510011.5	
The Responsible Party named above has preparing a new well location plat for a p	chosen to submit GPS coordinates in lieu of lugging permit or assigned API number on the
The Responsible Party named above has preparing a new well location plat for a p above well. The Office of Oil and Gas withe following requirements:  1. Datum: NAD 1983, Zone: 17 height above mean sea level (12. Accuracy to Datum – 3.05 me 3. Data Collection Method:	chosen to submit GPS coordinates in lieu of olugging permit or assigned API number on the ill not accept GPS coordinates that do not mee North, Coordinate Units: meters, Altitude: MSL) – meters.
The Responsible Party named above has a preparing a new well location plat for a p above well. The Office of Oil and Gas withe following requirements:  1. Datum: NAD 1983, Zone: 17 height above mean sea level (12. Accuracy to Datum – 3.05 me 3. Data Collection Method: Survey grade GPS xx : Post Process	chosen to submit GPS coordinates in lieu of olugging permit or assigned API number on the ill not accept GPS coordinates that do not mee North, Coordinate Units: meters, Altitude: MSL) – meters.
The Responsible Party named above has a preparing a new well location plat for a p above well. The Office of Oil and Gas withe following requirements:  1. Datum: NAD 1983, Zone: 17 height above mean sea level (12. Accuracy to Datum – 3.05 me 3. Data Collection Method: Survey grade GPS xx : Post Process	chosen to submit GPS coordinates in lieu of olugging permit or assigned API number on the ill not accept GPS coordinates that do not mee North, Coordinate Units: meters, Altitude: MSL) – meters. eters  sed Differential XX Differential
The Responsible Party named above has preparing a new well location plat for a p above well. The Office of Oil and Gas withe following requirements:  1. Datum: NAD 1983, Zone: 17 height above mean sea level (12. Accuracy to Datum – 3.05 me 3. Data Collection Method: Survey grade GPS: Post Process Real-Time I	chosen to submit GPS coordinates in lieu of olugging permit or assigned API number on the ill not accept GPS coordinates that do not mee North, Coordinate Units: meters, Altitude: MSL) – meters. eters  sed Differential XX Differential
The Responsible Party named above has preparing a new well location plat for a pabove well. The Office of Oil and Gas withe following requirements:  1. Datum: NAD 1983, Zone: 17 height above mean sea level (12. Accuracy to Datum – 3.05 me 3. Data Collection Method:  Survey grade GPS: Post Process  Real-Time I  Mapping Grade GPS: Post Process  Real-Time I  4. Letter size copy of the topog I the undersigned, hereby certify this data	chosen to submit GPS coordinates in lieu of olugging permit or assigned API number on the ill not accept GPS coordinates that do not mee North, Coordinate Units: meters, Altitude: MSL) – meters.  Seters  Sed Differential XX  Differential